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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/632,515

08/01/2003

Eric P. Worden

DP-308386

4341

7590

01/29/2004

DELPHI TECHNOLOGIES, INC.

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EXAMINER

NGUYEN, HANH N

ART UNIT

PAPER NUMBER

2834

DATE MAILED: 01/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/632,515	WORDEN ET AL.	
	Examiner	Art Unit	
	Nguyen N Hanh	2834	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____. | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1,2,4-7,9 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Trago et al.

Regarding claim 1, Trago et al. disclose an over molded motor stator structure comprising: a stator assembly (21 in Fig. 1 and 2) including a bobbin (Fig. 6 and 7) assembly around which a coil (73 in Fig. 13) is wound assembled to a stator core comprising a plurality of stator laminations having an internal diameter and an external diameter; said stator assembly being encapsulated by a unitizing material which forms an over molded motor stator structure including an integral unitized stator assembly and a molded main body (Col. 5, lines 5-10 and Fig. 9); wherein said stator assembly is encapsulated such that said internal diameter (Fig. 12) and said external diameter (Fig. 9) of said stator core is exposed.

Regarding claim 6, Trago et al. also disclose an over molded motor comprising; a rotor assembly (22 in Fig. 4) comprising a central rotor portion on a rotor shaft (50), said rotor assembly being adapted for support by bearings (23 and 24 in Fig. 5) located near end portions of said rotor shaft; said rotor assembly being rotatably disposed into an over molded motor stator structure (Fig. 1) in accordance with Claim 1.

Regarding claims 2 and 7, Trago et al. also disclose an over molded motor wherein said molded main body comprises at least one integral motor mounting portion (37).

Regarding claims 4 and 9, Trago et al. also disclose the over molded motor wherein said molded main body includes a bearing pocket support (26 in Figs. 2 and 9).

Regarding claims 5 and 10, Trago et al. also disclose the over molded motor wherein said over molded motor stator structure is suitable for use as molded without requiring additional machining processes (the method of forming the device is not germane to the issue of patentability of the device itself, therefore this limitation has not been given patentable weight).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 3 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Trago et al. in view of Dunning et al.

Regarding claims 3 and 8, Trago et al. show all limitations of the claimed invention except showing molded main body comprises at least one integral sensor cavity.

However, Dunning et al. disclose a motor structure wherein the motor cover (31 in Fig. 8) comprise one integral sensor cavity for the purpose of sensing the rotor.

Since Trago et al. and Dunning et al. are in the same field of endeavor, the purpose disclosed by Dunning et al. would have been recognized in the pertinent art of Trago et al.

It would have been obvious at the time the invention was made to a person having an ordinary skill in the art to modify Trago et al. by forming an integral sensor cavity in the molded main body as taught by Dunning et al. for the purpose of sensing the rotor.

Conclusion


3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh N Nguyen whose telephone number is (703) 305-3466. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703) 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

HNN

January 19, 2004


BURTON S. MULLINS
PRIMARY EXAMINER